

# Traffic Research & Data Center

WA Traffic Safety Commission, 1000 S. Cherry St., Olympia WA 98504 (360) 586-0886

## DRUNK DRIVING TRENDS IN WASHINGTON STATE: EVALUATION OF THE 1998 DUI LAWS

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Philip Salzberg and Anna Yamada

The Washington Legislature enacted numerous enhancements to the DUI laws in the 1998 session. Foremost among these changes were a reduction in the illegal per-se blood alcohol concentration from .10% BAC to .08% BAC and expansion of the administrative license suspension (ALS) provision to include all DUI offenses. Previously the ALS statute applied only to multiple offenders or first offenders with BACs above .15% BAC. Additional changes included an ignition interlock sentencing option, restrictions on deferred prosecution to allow only one deferral in a lifetime, a provision to allow courts to use electronic home monitoring for first DUI offenses in lieu of one day in jail, and a requirement for courts to keep DUI convictions permanently on record. The effective date for most of these provisions was January 1, 1999.

Long-term trend data on alcohol-related fatal crashes were examined to assess possible impacts of the new DUI laws. Trends in the crash data were established for the years 1991 through 1998, and these trends were then projected forward for 1999 to 2001. The projected numbers of crashes were then compared with the actual numbers for the three years following implementation of the new laws.

Additionally, trend data for DUI arrests and court filings were also examined to assess possible changes coinciding with the new laws.

Three data sources were analyzed for this study:

- The database of fatal traffic collisions (Source: Fatality Analysis Reporting System, FARS, 1991 to 2001).
- 2. Arrest data for drivers given breathalyzer tests (Source: Washington State Patrol, 1993 to 2001). This database records all breathalyzer tests given by all police agencies in the State. The database includes a field indicating the type of violation that led to the BAC test, ie, DUI or Physical Control, other traffic offenses, and non-traffic offenses. The data reported here is limited to DUI/Physical Control violations; other types of violations were excluded from the analysis. One factor influencing the number of DUI arrests is the priority that police agencies give to DUI enforcement. Because of possible changes occurring over time in such external factors, it is not certain whether the arrest data reflects the actual prevalence of drinking and driving. Also, it should be noted that the BAC database underestimates the number of drinking drivers who are seriously injured in crashes because they are often

transported to medical facilities and not given breathalyzer tests. The breathalyzer test data probably are a useful indicator of changes in the extent to which police agencies have emphasized DUI enforcement. The data on BAC levels may also point out changes in enforcement practices that target offenders at lower and higher levels of impairment.

3. Court activity data on DUI/Physical Control misdemeanors (Source: Office of the Administrator for the Courts, 1995 to 2001). This database records court filings, dispositions, and proceedings and reports them on a calendar year basis. It is not a case tracking system that links dispositions to the charges filed.

#### **RESULTS**

#### Alcohol-related Fatal Traffic Collisions.

Figures 1 and 2 show the data for fatal crashes involving drivers that Had Been Drinking (HBD) and the numbers of persons killed in HBD crashes. The trend lines that best fit the 1991-1998 data points were second order polynomial regressions. These trend lines are shown in the figures along with the trends projected into the 1999-2001 post-DUI law time-period.

The actual numbers of HBD fatal crashes and persons killed were below the projected numbers for 1999 to 2001. Over the three years following the new DUI laws there were approximately 80 fewer HBD fatal crashes and 100 fewer persons killed as compared to the numbers projected from the 1991 – 1998 trends.

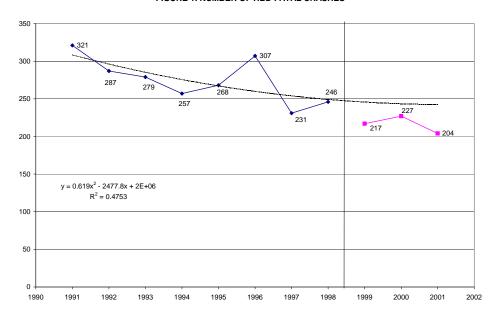
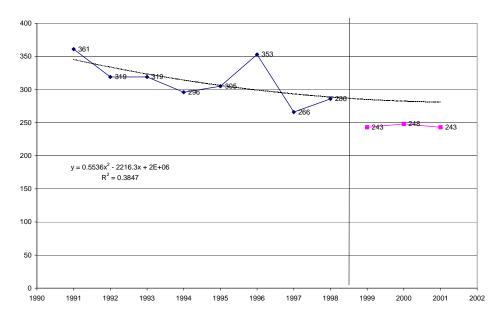


FIGURE 1. NUMBER OF HBD FATAL CRASHES

FIGURE 2. PERSONS KILLED - HBD DRIVER CRASHES



# Alcohol-Related Arrests (WSP Breathalyzer Database).

From 1995 to 2001 the annual number of alcohol-related arrests remained fairly stable. There was a substantial decrease of more than 11,000 between 1993 and 1995 coinciding with the Omnibus DWI Act of 1993 and its 1994 revisions. There appears to have been little change associated with the 1998 DUI laws (see Figure 3). The number of alcohol-related arrests in 1999 was virtually identical to 1998. While there were slightly fewer arrests in 2000 and 2001, the change was small (less than 3%).

Analysis of the DUI arrest data by BAC levels indicates that some changes associated with the 1998 laws may have occurred (see Table 1). Arrests of drivers at high BAC levels (.15 BAC and higher) decreased between 1998 and 1999 and remained lower over the next two years. In 2001 there were 14% fewer arrests of drivers with BACs above .15 compared to 1998 (see Figure 4).

In contrast, there was a greater number of arrests of drivers with lower BAC levels following implementation of the 1998 laws (see Table 1 and Figure 5). Arrests of drivers with BACs between .08 and .10 increased by 27%, and arrests of those with BACs under .08 increased by more than 20%. The average BAC level among all arrested drivers dropped from .15 to .14 between 1998 and 1999-2001 as a result of these changes.

FIGURE 3. ALCOHOL RELATED ARRESTS, BAC DATABASE, 1993 - 2001

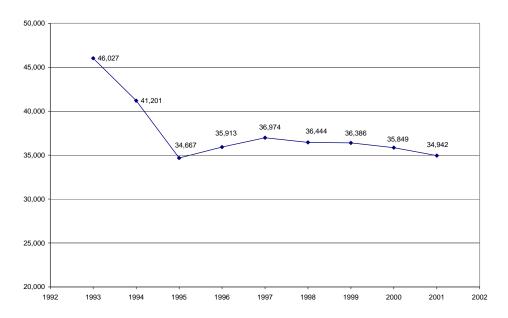


TABLE 1. WSP Breathalyzer Database: 1993-2001

Arrests Leading to Breathalyzer Tests\*

By BAC Test Results

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BAC LEVEL	1993	1994	1995	1996	1997	1998	1999	2000	2001	
.001-<.08	2,035	2,097	1,995	2,146	2,635	2,980	3,652	3,803	3,577	
.08-<.10	2,342	2,303	2,059	2,200	2,263	2,208	2,867	2,816	2,843	
.10-<.15	12,245	11,363	9,523	10,054	10,267	9,630	9,832	9,625	9,573	
.15-<.20	12,875	10,985	8,974	9,253	9,492	9,225	8,439	8,288	8,196	
.20+	7,941	6,695	5,216	5,183	5,354	5,542	4,943	4,703	4,481	
Refusal	8,589	7,758	6,900	7,077	6,963	6,859	6,653	6,614	6,272	
Total	46,027	41,201	34,667	35,913	36,974	36,444	36,386	35,849	34,942	

<sup>\*</sup>For positive BAC Test Results and Refusals. Zero BAC and invalid test results are not shown.

FIGURE 4. ALCOHOL-RELATED ARRESTS, BAC = .15 AND HIGHER

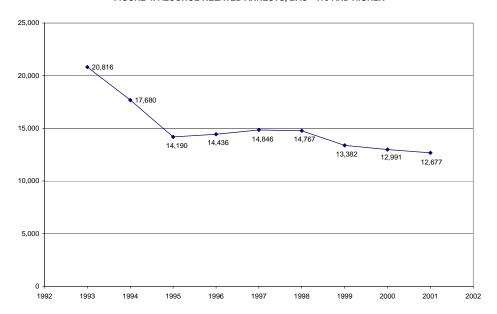
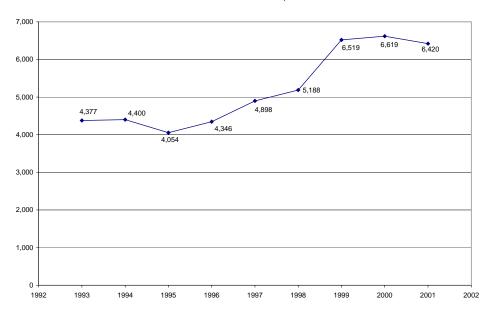


FIGURE 5. ALCOHOL-RELATED ARRESTS, BAC = .10 AND LOWER



### **DUI Court Filings and Dispositions.**

As shown in Table 2, the numbers of DUI/Physical Control citations filed in Washington courts increased between 1995 and 1998, followed by a slight downward trend between 1999 and 2001. These court filing data closely parallel the DUI arrest data from the breathalyzer database, although the court numbers are somewhat higher than the arrest numbers. This discrepancy likely is attributable to offenders who were not given breathalyzer tests but were charged with impaired driving; e.g., DUI-Drugs and alcohol-impaired drivers that were injured.

Guilty dispositions increased dramatically between 1995 and 2000 both in numbers and as a percentage of filings, rising from 40 percent to almost 60 percent with the greatest increase occurring between 1998 and 1999. In 2001 there was a substantial decrease in guilty dispositions which is most likely related to legal challenges to the validity of BAC testing procedures and implied consent warnings.

DUI charge that were reduced or amended to lesser charges have shown no consistent trend and account for slightly more than 25 percent of case filings. Deferred prosecutions remained at about the same level between 1995 and 2000, accounting for close to 25 percent of DUI case filings. There was a decrease in 2001, however, which could be related to either the "once in a lifetime" provision of the 1998 laws or to the legal challenges.

**Deleted:** . There was a large increase in guilty dispositions

**Deleted:** The data for 2001 is still preliminary which may account for the

# TABLE 2. DUI COURT FILINGS AND DISPOSITIONS, 1995 – 2001 (Source: Office of the Administrator for the Courts).

Washington State DUI/Physical Control Misdemeanors The Courts of Limited Jurisdiction 1995-2001\*

995-2001*								
		1995	1996	1997	1998	1999	2000	2001*
ilings								
Citations		35,539	37,352	37,835	38,623	38,484	37,673	36,582
Percent Change in Citations	-	5.1%	1.3%	2.1%	-0.4%	-2.1%	-2.9%	
Charge Dispositions								
Guilty		14,196	17,091	16,909	18,266	21,220	22,161	17,237
	Percent Filings	39.9%	45.8%	44.7%	47.3%	55.1%	58.8%	47.1%
Bail Forfeiture		70	54	74	43	39	34	23
	Percent Filings	0.2%	0.1%	0.2%	0.1%	0.1%	0.1%	0.1%
Not Guilty		333	275	278	285	264	228	185
	Percent Filings	0.9%	0.7%	0.7%	0.7%	0.7%	0.6%	0.5%
Dismissed <sup>1</sup>		8,713	9,242	8,848	9,698	9,736	10,794	6,687
·	Percent Filings	24.5%	24.7%	23.4%	25.1%	25.3%	28.7%	18.3%
Filings Charge Dispositions <sup>2</sup>								
Reduced/Amended to Lesser	Charge	9,525	9,040	10,019	9,321	10,263	10,188	10,373
	Percent Filings	26.8%	24.2%	26.5%	24.1%	26.7%	27.0%	28.4%
Prosecution Deferred/ Diverte		8,123	9,064	8,823	9,701	9,461	9.406	7,977
	Percent Filings	22.9%	24.3%	23.3%	25.1%	24.6%	25.0%	21.8%
,	crecit i illigs	22.570	24.570	20.070	20.170	24.070	20.070	21.070
Proceedings								
Jury Trial		927	1,017	982	951	908	915	838
	Percent Filings	2.6%	2.7%	2.6%	2.5%	2.4%	2.4%	2.3%
Non-Jury Trial		1,111	1,382	1,108	1,270	1,227	1,193	1,049
	Percent Filings	3.1%	3.7%	2.9%	3.3%	3.2%	3.2%	2.9%
Stipulation to the Record		4,097	3,037	3,007	2,608	2,488	2,677	2,647
	Percent Filings	11.5%	8.1%	7.9%	6.8%	6.5%	7.1%	7.2%
Arraignment		26,111	27,463	27,711	29,355	36,276	37,480	37,059
	Percent Filings	73.5%	73.5%	73.2%	76.0%	94.3%	99.5%	101.3%
Other Hearing on the Record		148,584	156,120	159,252	166,261	180,509	177,040	174,406
ľ	Percent Filings	-	-	-	-	-	-	-
rial Settings								
Jury Trial Settings <sup>4</sup>		33,197	30,368	26,696	26,005	26,736	25,384	24,930
	Percent Filings	93.4%	81.3%	70.6%	67.3%	69.5%	67.4%	68.1%
Settings to Jury Trials		36	30	27	27	29	28	30
	Percent Filings	-	-	-			-	
Non-Jury Trial Settings <sup>4</sup>		6,543	5,841	4,794	5,029	4,796	4,512	3,770
	Percent Filings	18.4%	15.6%	12.7%	13.0%	12.5%	12.0%	10.3%
Settings to Non-Jury Trials	go	6	4	4	4	4	4	4
	Percent Filings	-	-	-	-	-	-	<u> </u>
		L		1	1			
Appeals		1 444	000	075	005	000	050	070
Cases Appealed	Danaant Filin	444	283	275	295	288	350	270
, , , , , , , , , , , , , , , , , , ,	Percent Filings	1.2%	0.8%	0.7%	0.8%	0.7%	0.9%	0.7%

<sup>\*2001</sup> Data is as of 05/15/02.

<sup>1</sup> Dismissals include cases in which the defendant has successfully completed the terms of deferred prosecution.

<sup>2</sup> Charge dispositions do not reflect outstanding warrants. DUI dispositions--like DUI charges--include those for any secondary charge on a DUI citation.

<sup>3</sup> Beginning in 1999, the prosecution deferred/diverted count includes other deferrals and diversions in addition to those authorized under RCW 10.50.010. Figures are not comparable with prior years' data.

<sup>4</sup> Many settings occur for cases which never proceed to trial. Rescheduling of cases which do go to trial are also included.

#### DISCUSSION

The trend lines for HBD crashes and deaths from 1991 to 1998 showed a downward curvilinear trend that flattened out in later years, which suggests a slowing in the rate of improvement for HBD crashes. These data are consistent with national trends showing substantial reductions in alcohol-related traffic fatalities during the 1980s and 1990s, but with diminishing progress and actual increases in recent years. In contrast to the national trend, Washington data for the three years following the new DUI laws show fewer HBD crashes and deaths than would have been expected based on projections of the baseline trends.

While the crash data examined in this report provide evidence of a reduction in the incidence of alcohol-related fatal crashes and deaths following implementation of the 1998 DUI laws, attributing this finding to specific provisions in the new laws would be difficult. The laws were implemented as a package which precludes isolation of any single provision as the source of the change. It should be noted, however, that the .08 BAC law was widely publicized with extensive media coverage preceding and following the January 1, 1999 effective date and the installation of hundreds of highway signs that displayed the message:

#### **ALCOHOL LIMIT .08%**

### **DON'T DRINK AND DRIVE**

It does appear that police agencies were actively enforcing the .08 BAC provision of the law. Arrests of drivers with BACs between .08 and .10 increased more than 25% in 1999-2001 compared to the numbers of such arrests in prior years.

The data also suggest that the new DUI laws may have had an impact on drivers with high BAC levels; arrests for drivers with BACs above .15 decreased by 14%. Attributing this change to a reduced prevalence of high-BAC drivers on the road is problematical. However, it seems unlikely that changes in police enforcement practices or policy would result in reduced detection of extremely impaired drivers.

The courts reported a large increase in guilty dispositions between 1998 and 1999, which suggests that the judicial system responded positively to the DUI law changes.

In conclusion, the findings of this study show a reduction in the incidence of alcoholrelated fatal crashes and deaths that occurred over the three years following implementation of the 1998 DUI laws.